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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
FOWLKES, ANDRE R	

ART UNIT	PAPER NUMBER
2192	

DATE MAILED: 01/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/044,290	BANDHOLE ET AL.	
	Examiner	Art Unit	
	Andre R. Fowlkes	2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10/31/05*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/31/05 has been entered.

2. Claims 1, 17, 20 and 21 have been amended. Claims 1-21 are pending.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over White, U.S. Patent No. 5,896,530 in view of McNally, et al., (McNally), U.S. Patent No. 6,259,448 (art made of record).

As per claim 1, White discloses a **method of using a dynamic computing environment ("DCE") for a plurality of phases in a software lifecycle,** (col. 1:12-17,

"This invention relates ... to a system and method enabling a plurality of computers and associated computer resources, some or all of which may be heterogeneous in configuration (i.e. a DCE), to cooperatively process a variety of (software lifecycle) applications"), **the method comprising:**

- configuring the dynamic computing environment for a first phase in the plurality of phases (col. 3:40-44, "a system and method of computer software architecture for enabling a plurality of computers, and associated computer resources, some or all of which may be heterogeneous in configuration (i.e. a DCE), to cooperatively process applications (i.e. phases)", and col. 7:51-52, "dynamic changes to device configurations"),

-wherein said configuring comprises:

- allocating a first subnet (col. 3:40-44, "a system and method of computer software architecture for enabling (i.e. allocating) a plurality of computers (i.e. subnets), and associated computer resources (i.e. subnets), some or all of which may be heterogeneous in configuration (i.e. a DCE), to cooperatively process applications"),

- allocating a first computing device coupled to the first subnet (col. 3:40-44, "a system and method of computer software architecture for enabling (i.e. allocating) a plurality of computers, and associated computer resources, some or all of which may be heterogeneous in configuration (i.e. a DCE), to cooperatively process applications)"),

- allocating a first storage device coupled to the first computing device (col. 3:40-44, "a system and method of computer software architecture for enabling (i.e. allocating) a plurality of computers, and associated computer resources (i.e. storage), some or all of which may be heterogeneous in configuration (i.e. a DCE), to cooperatively process applications"),

- storing a first set of instructions on the first storage device (col. 3:40-44, "a system and method of computer software architecture for enabling a plurality of computers, and associated computer resources, some or all of which may be heterogeneous in configuration (i.e. a DCE), to cooperatively process applications (i.e. instructions on the storage device)"),

- using the configured dynamic computing environment in the first phase (col. 3:40-44, "a system and method of computer software architecture for enabling a plurality of computers, and associated computer resources, some or all of which may be heterogeneous in configuration, to cooperatively process applications (i.e. phases)"),

- configuring the dynamic computing environment for a second phase in the plurality of phases (col. 3:40-44, "a system and method of computer software architecture for enabling a plurality of computers, and associated computer resources, some or all of which may be heterogeneous in configuration, to cooperatively process applications (i.e. phases)"),

- using the configured dynamic computing environment in the second phase (col. 3:40-44, "a system and method of computer software architecture for enabling a plurality of computers, and associated computer resources, some or all of

which may be heterogeneous in configuration, to cooperatively process applications (i.e. phases)").

White doesn't explicitly disclose:

- deallocating one or more of the first subnet, the first computing device, and the first storage device

-allocating a second subnet

- allocating a second computing device coupled to the second subnet

- allocating a second storage device coupled to the second computing device

- storing a second set of instructions on the second storage device

However, McNally, in an analogous environment, discloses:

- deallocating one or more of the first subnet, the first computing device, and the first storage device (col. 8:63-9:10, "The configuration (i.e. deallocating one or more subnets) and method begins at step 60 by having an administrator open up a resource modeling desktop (e.g., a deployment task window on the GUI). At step 62, the administrator selects a resource model (i.e. subnet) to be deployed or implements a new model"),

-allocating a second subnet (McNally discloses multiple subnets at fig. 7:72a-72c, and associated text, e.g. col. 10:55-11:26),

- **allocating a second computing device coupled to the second subnet** (col. 2:56-60:, "The icon representing the resource model is then associated with a selected one of the distributed icons, preferably via a drag-and-drop protocol. When the resource model icon is dropped onto the selected distribution icon, the resource model is deployed in the network", and col. 1:44-51, "To manage such distributed systems, it has been proposed to "abstract" a given "resource" in the distributed network into a so-called "model" to facilitate administration. Examples of distributed system resources include computer and communications hardware, operating system software, application programs, systems of programs cooperating to provide a service, and the like"),

- **allocating a second storage device coupled to the second computing device** (col. 2:56-60:, "The icon representing the resource model is then associated with a selected one of the distributed icons, preferably via a drag-and-drop protocol. When the resource model icon is dropped onto the selected distribution icon, the resource model is deployed in the network", and col. 1:44-51, "To manage such distributed systems, it has been proposed to "abstract" a given "resource" in the distributed network into a so-called "model" to facilitate administration. Examples of distributed system resources include computer and communications hardware (i.e. storage devices), operating system software, application programs, systems of programs cooperating to provide a service, and the like"),

- **storing a second set of instructions on the second storage device** (col. 2:56-60:, "The icon representing the resource model is then associated with a selected

one of the distributed icons, preferably via a drag-and-drop protocol. When the resource model icon is dropped onto the selected distribution icon, the resource model is deployed in the network", and col. 1:44-51, "To manage such distributed systems, it has been proposed to "abstract" a given "resource" in the distributed network into a so-called "model" to facilitate administration. Examples of distributed system resources include computer and communications hardware, operating system software, application programs, systems of programs cooperating to provide a service, and the like").

Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to incorporate the teachings of McNally into the system of White to have:

- deallocating one or more of the first subnet, the first computing device, and the first storage device,

-allocating a second subnet,

- allocating a second computing device coupled to the second subnet,

- allocating a second storage device coupled to the second computing device,

- storing a second set of instructions on the second storage device.

The modification would have been obvious because one of ordinary skill in the at would have wanted a convenient way of dynamically creating, allocating, using and

deleting multiple subnets and their components, to fully exploit the advantages of a distributed computing environment, McNally, col. 1:42-62.

As per claim 2, the rejection of claim 1 is incorporated and further, White discloses that **the plurality of phases comprise a development phase** (col. 4:22, "enabling development of application(s)").

As per claim 3, the rejection of claim 2 is incorporated and further, White discloses:

- **using the configured DCE for a first task** (col. 3:40-44, "a system and method of computer software architecture for enabling a plurality of computers, and associated computer resources, some or all of which may be heterogeneous in configuration, to cooperatively process applications (i.e. multiple tasks processed simultaneously)"),

- **using the configured DCE simultaneously with the first task for a second task** (col. 3:40-44, "a system and method of computer software architecture for enabling a plurality of computers, and associated computer resources, some or all of which may be heterogeneous in configuration, to cooperatively process applications (i.e. multiple tasks processed simultaneously)").

As per claim 4, the rejection of claim 1 is incorporated and further, White discloses that **the plurality of phases comprise an integration phase** (col. 4:25-26, "enabling applications to be tested as large integrated applications").

As per claim 5, the rejection of claim 4 is incorporated and further, White discloses **using the configured DCE for an integration phase comprises:**

- executing the first set of instructions on the first computing device, wherein the first set of instructions causes a first set of information to be transmitted to a third computing device coupled to the first subnet (col. 3:40-44, "a system and method of computer software architecture for enabling a plurality of computers, and associated computer resources, some or all of which may be heterogeneous in configuration (i.e. several subnets), to cooperatively process applications (i.e. execute instructions)"),

- in response to the first set of information, executing a third set of instructions on the third computing device (col. 3:40-44, "a system and method of computer software architecture for enabling a plurality of computers, and associated computer resources, some or all of which may be heterogeneous in configuration (i.e. several subnets), to cooperatively process applications (i.e. multiple tasks processed simultaneously)"),

- monitoring said executing the first and third set of instructions and a result of said executing the third set of instructions (col. 35:57, "a system has ... a transaction processing monitor", and col. 3:40-44, "a system and method of computer

software architecture for enabling a plurality of computers, and associated computer resources, some or all of which may be heterogeneous in configuration (i.e. several subnets), to cooperatively process applications (i.e. multiple tasks processed simultaneously)").

As per claim 6, the rejection of claim 1 is incorporated and further, White discloses that **the plurality of phases comprise a testing phase** (col. 4:25-26, "enabling applications to be tested").

As per claim 7, the rejection of claim 6 is incorporated and further, White doesn't explicitly disclose **if said using the configured DCE in the first phase results in an error, re-provisioning a clean environment in the configured DCE during the testing phase.**

However, McNally, in an analogous environment, discloses **if said using the configured DCE in the first phase results in an error, re-provisioning a clean environment in the configured DCE during the testing phase** (col. 10:8-12 "a test is performed to determine whether the target hosts are represented by an existing domain. As used herein, a "domain" represents a set of target nodes for deployment). If the outcome of the test at step 63 is negative, the routine branches to step 64 to create a new domain", and col. 8:63-9:10, "The configuration and method begins at step 60 by having an administrator open up a resource modeling desktop (e.g., a deployment task

window on the GUI). At step 62, the administrator selects a resource model to be deployed or implements a new model").

Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to incorporate the teachings of McNally into the system of White to have **if said using the configured DCE in the first phase results in an error, re-provisioning a clean environment in the configured DCE during the testing phase.** The modification would have been obvious because one of ordinary skill in the at would have wanted a convenient way of dynamically creating, allocating, using and deleting multiple subnets and their components, to fully exploit the advantages of a distributed computing environment, McNally, col. 1:42-62.

As per claim 8, the rejection of claim 1 is incorporated and further, White discloses **a beta testing phase, wherein a first user performs said using the configured DCE in the first phase, and a second user performs said using the configured DCE in the second phase** (col. 4:25-26, "enabling applications to be tested (in multiple phases)", and col. 17:5-10, "Similarly, more than one user may have multiple applications active on multiple systems at any one point in time.", and col. 24:50-60, "modifications of program logic, data base query, panels, and/or any other components of the transaction will always be installed synchronously").

As per claim 9, the rejection of claim 8 is incorporated and further, White discloses that **during the beta testing phase, said configuring the DCE comprises**

the first user installing the first set of instructions on the DCE and said using the configured DCE comprises the first user beta testing the first set of instructions using the DCE (col. 18:3-5, "when installing an application in a new system or when redeploying a new release of an application", and col. 4:25-26, "enabling applications to be tested (in multiple phases)", and col. 17:5-10, "Similarly, more than one user may have multiple applications active on multiple systems at any one point in time.", and col. 24:50-60, "modifications of program logic, data base query, panels, and/or any other components of the transaction will always be installed synchronously").

As per claim 10, the rejection of claim 1 is incorporated and further, White discloses **a staging phase** (col. 10:12, "(the system) provides for development of applications that execute under control of the IET through the user interface, and performs background functions at each stage of the application development. These stages can be defined as definition (i.e. staging), composition, construction and deployment").

As per claim 11, the rejection of claim 10 is incorporated and further, White discloses **installing a new version of the first set of instructions and wherein using the configured dynamic computing environment comprises enabling access for at least one user to the new version of the first set of instructions** (col. 18:3-5, "when installing an application in a new system or when redeploying a new release of an application").

As per claim 12, the rejection of claim 1 is incorporated and further, White discloses **a deployment phase** (col. 10:12, "(the system) provides for development of applications that execute under control of the IET through the user interface, and performs background functions at each stage of the application development. These stages can be defined as definition (i.e. staging), composition, construction and deployment").

As per claim 13, the rejection of claim 12 is incorporated and further, White discloses **testing the first set of instructions; and updating the first set of instructions if updates are required** (col. 4:25-26, "enabling applications (i.e. a set of instructions) to be tested", and col. 4:19-20, "providing real time application upgrades").

As per claim 14, the rejection of claim 1 is incorporated and further, White discloses that **the software lifecycle comprises a shrink-wrap lifecycle** (col. 10:12, "(the system) provides for development of applications that execute under control of the IET through the user interface, and performs background functions at each stage of the application development. These stages can be defined as definition (i.e. staging), composition, construction and deployment", and the White system allows all of the operations performed during shrink wrap lifecycle development).

As per claim 15, the rejection of claim 1 is incorporated and further, White discloses that **the software lifecycle comprises a web site lifecycle** (col. 10:12, "(the system) provides for development of applications that execute under control of the IET through the user interface, and performs background functions at each stage of the application development. These stages can be defined as definition (i.e. staging), composition, construction and deployment", and the White system allows all of the operations performed during website lifecycle development).

As per claim 16, the rejection of claim 1 is incorporated and further, White discloses that **the software lifecycle comprises an ASP lifecycle** (col. 10:12, "(the system) provides for development of applications that execute under control of the IET through the user interface, and performs background functions at each stage of the application development. These stages can be defined as definition (i.e. staging), composition, construction and deployment", and the White system allows all of the operations performed during ASP lifecycle development).

As per claims 17-19, this is another method version of the claimed method discussed above, in claims 1-16, wherein all claimed limitations have also been addressed and/or cited as set forth above. For example, see the White/McNally system (e.g. White col. 137:7-144:38 and McNally 1:44-11:26).

As per claim 20, this is an apparatus version of the claimed method discussed above, in claim 1, wherein all claimed limitations, except for the use of virtual computing devices/subnets have also been addressed and/or cited as set forth above. For example, see Whites portable and dynamic distributed applications architecture (col. 137:7-144:38). White discloses **the use of virtual subnets and virtual computing** devices (definition: computing devices and subnets that are part of the DCE but whose resources have not been allocated yet, specification p.7:13-16) at col. 3:40-44, "a system and method of computer software architecture for enabling a plurality of computers, and associated computer resources, some or all of which may be heterogeneous in configuration (i.e. a DCE), to cooperatively process applications (i.e. instructions on the storage device)", and col. 7:51-52, "dynamic changes to device configurations (i.e. allocation of devices)".

As per claim 21, this is a system version of the claimed method discussed above, in claim 1, wherein all claimed limitations have also been addressed and/or cited as set forth above. For example, see the White/McNally system (e.g. White col. 137:7-144:38 and McNally 1:44-11:26).

Response to Arguments

5. Applicant's arguments on p. 7:15-8:24 & 9:13-18, with respect to claims 1, 7, 17, 20 & 21 have been considered but are moot in view of the new ground(s) of rejection.

6. Applicant's arguments on p. 9:1-12, have been fully considered but they are not persuasive.

In the remarks, the applicant has argued substantially that:

1) White does not disclose the "allocating" limitations of claim 1, at p. 9:1-12.

Examiner's response:

1) The examiner disagrees with applicant's characterization of the applied art. White does disclose the "allocating" limitations of claim 1, at col. 3:40-44, "a system and method of computer software architecture for enabling (i.e. allocating) a plurality of computers, and associated computer resources, some or all of which may be heterogeneous in configuration, to cooperatively process applications)".

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre R. Fowlkes whose telephone number is (571) 272-3697. The examiner can normally be reached on Monday - Friday, 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (571)272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ARF

TUAN DAM
SUPERVISORY PATENT EXAMINER